Foreword

The rapid pace of technology change and adoption has led to the fear that our 21st century societies are now approaching the nightmare scenarios that were once predicted in such dystopian and futuristic novels as George Orwell's *1984* and Ben Elton's *Blind Faith*. The specter of terrorism has presented governments with the justification to introduce surveillance of the citizenry on an unprecedented scale. It is therefore timely that Katina and Michael have written this book which examines the trajectory of automatic identification and location-based services (LBS) from bar codes to chip implants. Of course, not all of these innovative techniques should be viewed negatively. Electronic health monitoring solutions, for instance, are helping doctors gather accurate and timely medical data about their patients and their needs. In the area of criminal intelligence, GPS tracking units are being used by law enforcement agencies to gather evidence toward convicting suspects of criminal activities or keeping track of parolees who have been released from prison.

I have had the pleasure of working with Katina and Michael for many years now. Katina provided the many thought-provoking case studies for the 3rd edition of my book *Internet Commerce: Digital Models for Business*. It was also my pleasure to be on the panel that examined her first class PhD where she initially investigated many of the technologies that appear in this book. With Michael, I have presented at a number of international conferences where his stimulating presentations are evidence of his broad education and intelligent projections.

The authors have developed a valuable and constructive conceptual framework that serves to allow for the proper analysis and critique of the rapid advances made in LBS. The historical presentation of these technological advances provides for an expert insight into how we have arrived at the respective innovations. Each of the case studies serves to illustrate the usage of the luggable, wearable and implantable devices for a diverse range of sectors, and the predictive chapter on uberveillance serves as a warning of what a number of thinkers are now increasingly beginning to agree, could become a reality. Indeed, it is not surprising that *uberveillance* was one of ninety-two words from around the English-speaking world, chosen to enter the Macquarie Dictionary in 2008 and in the running for Word of the Year. The authors have also tackled the all important social and ethical issues before presenting this glimpse into a potentially ominous future.

Original contributions of this cross-disciplinary work include: the extension of the terms technological trajectory and selection environment from the innovation literature as applied to automatic identification and location-based services; the introduction of the new concepts of *electrophorus* (as opposed to cyborg) and *uberveillance* (an above and beyond, exaggerated surveillance); and the unique reflections of the expert interviewees that strike at the core of current and future possibilities. Given that serious and restrained publications on this contentious subject of humancentric implants are in the main terribly scant, *Innovative Automatic Identification and Location-Based Services (LBS): From Bar Codes to Chip Implants* is a major addition to international bibliography.

I congratulate Katina and Michael on the writing of this well-timed and important book- it is vital that we learn to recognize the impact of emerging technologies such as the ones which have been addressed, so we can keep what is best and refuse that which is destructive to ourselves and to our society. One way or another, for better or for worse, the applied consequences of these decisions especially at the practical level will be for the greater part, if not entirely, irreversible.

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